ORIGINAL

0000036845

30T

**BEFORE THE ARIZONA CORPORATION COMMISSION**

COMMISSIONERS
JEFF HATCH-MILLER - Chairman
WILLIAM A. MUNDELL
MARC SPITZER
MIKE GLEASON
KRISTIN K. MAYES

RECEIVED

2005 DEC -5 P 3: 32

AZ CORP COMMISSION
DOCUMENT CONTROL

| | |
|---|---|
| IN THE MATTER OF THE APPLICATION OF DUNCAN RURAL SERVICES CORPORATION FOR A RATE INCREASE | DOCKET NO. G-02528A-05-0314<br><br>**NOTICE OF FILING TESTIMONY** |

The Utilities Division ("Staff") provides this notice that it has filed the Surrebuttal Testimony of Daniel Zivan and Steven Irvine.

RESPECTFULLY SUBMITTED this 5th day of December 2005.

Jason D. Gellman, Attorney
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007
(602) 542-3402

The original and thirteen (13) copies of the foregoing were filed this 5th day of December 2005 with:

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Copies of the foregoing were mailed
this 5th day of December 2005 to:

Mike Grant, Esq.
Gallagher & Kennedy, P.A.
2575 East Camelback Road
Phoenix, Arizona 85016-9225

John Wallace
GCSECA
120 North 44th Street, Suite 100
Phoenix, Arizona 85034

Lyn Farmer
Chief Administrative Law Judge, Hearing Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85004

Christopher Kempley
Chief Counsel, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85004

Ernest Johnson
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85004

Deborah Amaral

**SURREBUTTAL**

**TESTIMONY**

**OF**

**DANIEL ZIVAN**

**STEVE IRVINE**

**DOCKET NO. G-02528A-05-0314**

**IN THE MATTER OF THE APPLICATION OF DUNCAN RURAL SERV ICES CORPORATION FOR A RATE INCREASE**

**DECEMBER 5, 2005**

# ZIVAN

**BEFORE THE ARIZONA CORPORATION COMMISSION**

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MARC SPITZER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

| | | |
|---|---|---|
| IN THE MATTER OF THER APPLICATION OF | ) | DOCKET NO. G-02528A-05-0314 |
| DUNCAN RURAL SERVICES CORPORATION | ) | |
| FOR A RATE INCREASE | ) | |
| | ) | |

SURREBUTTAL

TESTIMONY

OF

DANIEL ZIVAN

PUBLIC UTILITIES ANALYST III

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

DECEMBER 5, 2005

# TABLE OF CONTENTS



## SCHEDULES

**EXECUTIVE SUMMARY**
**DUNCAN RURAL SERVICES CORPORATION**
**DOCKET NO. G-02528A-05-0314**

The Surrebuttal testimony of Staff witness Daniel Zivan addresses the following issues:

Long-term debt – Staff's recommendation included in its direct testimony remains unchanged.

Interest expense – Staff's recommendation included in its direct testimony remains unchanged.

Revenue annualization – After reviewing the information provided in Duncan Rural Services Corporation ("Duncan") rebuttal testimony, Staff retracts its annualization adjustment included in its direct testimony. Staff's revised position decreases test year revenue by $2,574 and precipitates the need for an equal boost to the revenue increase.

Line of credit – Staff recommends approval of a $70,000 line of credit for Duncan to borrow from Duncan Valley Electric Cooperative for the exclusive purpose of financing increases to its under-collected Purchased Gas Adjustor ("PGA") bank balance.

Revenue requirement – Staff's recommendation included in its direct testimony remains unchanged.

Arizona Corporation Commission Assessment Charge ("ACC Assessment") bill add-on – Staff's recommendation included in its direct testimony remains unchanged.

## I. INTRODUCTION

**Q. Please state your name, occupation, and business address.**

A. My name is Daniel Zivan. I am a Public Utilities Analyst III employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

**Q. Did you previously file direct testimony in this case?**

A. Yes.

**Q. What is the purpose of your surrebuttal testimony in this proceeding?**

A. The purpose of my surrebuttal testimony in this proceeding is to present Staff's response to the rebuttal testimony of Duncan Rural Services Corporation ("Duncan" or the "Cooperative") witnesses Mr. Jack Shilling and Mr. John V. Wallace regarding long-term debt financing, interest expense, revenue annualization, a line of credit, revenue requirement and a bill add-on.

**Q. What other Staff witnesses are involved in the presentation of Staff's responses to rebuttal testimonies?**

A. Staff witness Steve Irvine is presenting Staff responses to the Cooperative's rebuttal testimonies regarding purchased gas adjustor ("PGA") $0.10 bandwidth, combining Summer and Winter rates, uniform commodity rates across customer classes, and the effect on rates from Staff's revocation of its $2,574 revenue annualization adjustment.

**Q. How is your surrebuttal testimony organized?**

A. My surrebuttal testimony is organized in seven sections. Section I is this introduction. Section II discusses long-term debt. Section III discusses interest expense. Section IV discusses the Arizona Corporation Commission Assessment Charge ("ACC Assessment"). Section V discusses Staff's annualization adjustment. Section VI discusses Staff's recommendation for a line of credit. Section VII discusses the revenue requirement for Duncan.

## II. LONG-TERM DEBT FINANCING

**Q. Did Duncan change its financing request in its rebuttal testimony?**

A. Yes. Duncan initially requested authorization to incur $268,988 of debt. Duncan's rebuttal increased the requested debt authorization to $600,000 to cover $502,000 of current advances from Duncan Valley Electric Cooperative, Inc. ("DVEC") and provide $98,000 for future advances from DVEC (Shilling Rebuttal at Page 6).

**Q. Does Staff have concerns with Duncan's proposed loan amount of $600,000?**

A. Yes. Duncan's capital structure at the end of the test year consisted of 142 percent debt and negative 42 percent patronage capital. Issuing any additional long-term debt would further exacerbate Duncan's excessively leveraged capital structure and make achieving Staff's recommended equity goals even more difficult. Additionally, issuing $600,000 of long-term debt would cause past operating expenses to be converted to long-term debt; therefore, putting the burden of paying past operating expenses on future customers.

**Q. What amount of long-term debt is Staff recommending?**

A. Staff recommends long-term debt financing in the amount of $330,484. This represents the amount that Duncan spent on plant improvements and the amount that Staff recommended in its direct testimony. In addition, as discussed later, Staff also recommends authorization for a $70,000 line of credit to finance the under-collected purchased gas adjustor ("PGA") balance to the extent that the under-collection increases from the balance at the time of implementation of new rates as ordered in this rate case.

**Q. What support does Duncan provide to rebut Staff's position that authorizing debt to cover obligations resulting from previously incurred operating expenses would not result in cost shifting?**

A. Duncan provided the following response.

> DRSC has experienced a decline in its customer base. DRSC's customer base has been the same customers who have taken service from DRSC for years. Consequently, its existing customers were present when these advances were incurred and are still present today (Shilling Rebuttal at Page 6).

**Q. Would a declining customer base preclude the cost shifting?**

A. No. A declining customer base shifts costs from customers that discontinue service to those that retain service since the Cooperative can no longer recover the costs incurred to provide service to customers that leave the system that have effectively been deferred for recovery to a later period.

**Q. Does the Cooperative's rebuttal testimony correctly state Staff's position regarding Duncan's obligations to DVEC that are not authorized for conversion to long-term debt?**

A. No. The Cooperative states:

> . . . Staff has not recommended that all of DRSC's cash advances be converted to LTD but has only recommended that $330,484 be converted and the remaining amounts of advances of $171,516 be repaid when these funds are available (Schilling Rebuttal at Page 4).

This statement is not accurate as Staff did not make a recommendation in its direct testimony regarding how the remaining advances should be treated.

**Q. How does Staff view the remaining advances?**

A. The remaining cash advances are not debt because they were not authorized by the Commission. However, the cash advances did occur, therefore, Staff views them as equity infusions from DVEC.

**Q. Is the historical cash-advance relationship that has developed between DVEC and Duncan appropriate?**

A. No. Duncan has continually borrowed money from DVEC effectively delaying applying for a rate increase. This behavior is an inappropriate way for Duncan to address its stressed financial situation and only serves to prolong and exacerbate its condition. As stated in Staff's direct testimony, the implication for DVEC from this relationship is less immediate cash available for its own operations and potential harm to its ratepayers in the event the advances are not repaid. Delays in repayment could affect the timing and amount of DVEC rate adjustments. Duncan should request rate relief when dictated by cash flow needs rather than relying on DVEC to pay operating expenses and fund plant improvements.

## III. INTEREST EXPENSE

**Q. What does Duncan recommend for interest expense?**

A. In its rebuttal testimony Duncan recommends interest expense in the amount of $39,187 which includes $14,087 of interest expense on current loans and $25,100 of interest expense at 5 percent related to the $502,000 existing obligation to DVEC that is a portion of the requested $600,000 loan [$14,087 + ($502,000 x .05)] = $39,187.

**Q. Does Staff agree with Duncan's use of 5 percent to determine the annual interest expense amount?**

A. No. Duncan did not explain why it used an interest rate of 5 percent to calculate its interest expense. The applicable interest rate on long-term debt is equal to the Arizona Electric Power Cooperative Inc.'s ("AEPCO") interest rate charged on "270 Day Fixed Rate Notes", which is currently[1] 2.725 percent. There is no evidence that the rate has changed.

**Q. Does Staff agree with the Cooperative's proposed interest expense?**

A. No. First, Staff recommends interest expense based on existing debt and Staff's recommend $330,484 additional debt authorization. The Cooperative used the existing debt and $502,000 of requested debt to calculate interest expense. Second, Staff used an interest rate of 2.725 percent to determine the level of interest expense of $23,093 which represents $14,087 for existing long-term debt and $9,006 for the recommended $330,484 long-term debt. The Cooperative used $14,087 for the existing debt and applied a 5 percent rate to its $502,000 amount.

**IV. ACC ASSESSMENT BILL ADD-ON**

**Q. Does Duncan agree with Staff's recommended Operating Income Adjustment No. 3 that removes the ACC Assessment from revenue and expenses?**

A. Yes. Duncan agrees to the removal of the ACC Assessment from revenues and expenses (Wallace Rebuttal at Page 6). However, the Cooperative objects to recovering the ACC Assessment through a bill add-on. Staff has interpreted the Cooperative's objection as meaning it does not want to show the ACC Assessment as a separate line item on customer bills but would combine the Assessment with other charges.

[1] September 2, 2005

**Q. Is combining the ACC Assessment with other charges on the customer bill acceptable to Staff?**

A. No. Placing the ACC Assessment on a separate line would require incurring programming costs with the Cooperative's current billing system. The Cooperative is in the process of updating its billing system to one that more readily provides a separate line for the ACC Assessment. The Cooperative is concerned with the cost of programming the current billing system when it is in the process of converting to a new one. The billing system update may take a year to complete. Staff is sympathetic to the Cooperative's circumstances and supports allowing Duncan to postpone presenting the ACC Assessment on a separate line until its billing system is updated.

## V. REVENUE ANNUALIZATION

**Q. Did Duncan present any support in its rebuttal testimony for its claim that Staff's Operating Income Adjustment No. 1 – Revenue Annualization is unnecessary because Duncan has not experienced measurable growth?**

A. Yes. The Company's RUS Form 7 Report, Part R (Wallace, Rebuttal Attachment), shows that 2005 customer counts are less than the test year level. Therefore, Staff retracts its $2,574 adjustment to annualize test year revenue.

## VI. LINE OF CREDIT

**Q Does Staff recognize a potential cash flow need for Duncan in addition to rates?**

A. Yes. Due to the magnitude and seasonality of the cost of gas for natural gas distribution utilities there is a significant seasonal lead or lag between recovery and payment of gas costs. For utilities such as Duncan with adjustor mechanisms, this lead or lag is reflected in a PGA bank balance. It is not unusual for a PGA bank balance to exceed the on-going cash flow generated from authorized returns. Accordingly, natural gas distributions utilities need a method to finance under-collected PGA bank balances. Accordingly, Duncan may require additional financing for under-collected gas costs.

**Q. Does Staff have a recommendation that would assist the Cooperative with cash flow needs related to under-collected PGA bank balances?**

A. Yes. Staff recommends authorization of a $70,000 revolving line of credit for Duncan to borrow funds from DVEC with an interest rate equal to the AEPCO's rate of interest charged on "270 Day Fixed Rate Notes", which is currently 2.725 percent.

**Q. How should the line of credit be used?**

A. The line of credit should be approved with the condition that it be used exclusively to address Duncan's under-collected PGA bank balance. Duncan would have use of the line of credit for amounts greater than the balance of the under-collected PGA bank balance at the time that rates from this rate proceeding are implemented. For example, if Duncan's under-collected bank balance at the implementation of the approved rates in this rate case is $30,000 and then after three months the under-collected PGA bank balance increased to $45,000, then Duncan would be able to borrow $15,000 against the line of credit. If the under-collected bank balance subsequently decreased to $35,000, then Duncan would be required to repay $10,000 of the line of credit balance to DVEC so that the borrowed balance each month is maintained at, or below, the amount that the under-collected balance exceeds $30,000. In this example, at no point would Duncan be able to borrow from the line of credit when the under-collected balance drops below $30,000, the balance at the date new rates become effective.

**VII. REVENUE REQUIREMENT**

**Q. What is Duncan's proposed revenue increase?**

A. Duncan requested a revenue increase of $147,406 in its initial application. The Cooperative's rebuttal testimony boosted the requested revenue increase to $167,705 (Wallace Rebuttal, Page 3). Duncan requested the additional increase to provide a 2.00 times interest earned ratio ("TIER") based on the assumption that the Commission authorizes $502,000 of additional long-term debt at 5 percent. Additionally, Duncan has requested a 5 percent rate increase effective January 1, 2006, which is 17 days after the scheduled December 15, 2005 hearing and another 5 percent increase to become effective January 1, 2007.

Duncan asserts that its revised revenue requirement is needed to comply with Staff's recommendations to increase equity to 30 percent of total capital and to discontinue use of unauthorized cash advances from DVEC (Schilling Rebuttal at Page 2).

**Q. Are these reasons adequate justification for Duncan's boosted revenue requests?**

A. No. First, as previously discussed, Staff is recommending authorization for a $70,000 line of credit from DVEC to finance increases in the Cooperative's PGA bank balance. Second, Staff's recommend revenue provides sufficient cash flow to achieve Staff's recommendation for the Cooperative to grow its equity by 5 percent yearly.

**Q. What net margin must the Cooperative experience to grow equity by 5 percent?**

A. The Cooperative's filing shows total capital of $363,884 at the end of the test year. If total capital remains at $363,884 at the end of 2005, the Cooperative will need a net margin of $18,194 ($363,000 x .05) to achieve Staff's recommended equity growth of five percent. Staff's recommended revenue results in a net margin of $42,682 providing an excess of

$24,488. In other words, the Cooperative can experience a combination of revenue declines or expense increases and still achieve 5 percent growth in equity.

**Q. How will the Cooperative's estimated average $80,000 per year capital expenditures over the next five year affect its ability to achieve 5 percent growth in equity?**

A. Assuming a 3.6 depreciation rate and a 3.00 percent interest expense, each $1,000 of incremental borrowing for capital expenditures will erode $116 of the $24,488 excess in the initial year and $66 each year thereafter. Table 1 below shows the net margin required in each of the first three years to support only the Cooperative's estimated $80,000 per year capital improvements and grow equity by 5 percent each year assuming all funds are borrowed and the Cooperative's equity balance remains negative.

Table 1

| Year | Interest | Depreciation | Capital (5%) | Total |
|---|---|---|---|---|
| One | $2,400 | $2,880 | $4,000 | $9,280 |
| Two | $4,800 | $5,760 | $4,000 | $14,560 |
| Three | $7,200 | $8,640 | $4,000 | $19,840 |

Combining the net margin requirement for year three (worst case scenario) of $19,840 with the $18,194 requirement based on the test year end results in a total annual net margin requirement of $38,034, which is less than the $42,682 net margin provided by Staff's recommended revenue.

## SURREBUTTAL SUMMARY

**Q. Please summarize Staff's surrebuttal testimony.**

A. Staff recommends the following:

Long-term debt – Staff recommends that long-term debt financing in the amount of $330,484 be approved.

Interest expense – Staff recommends interest expense in the amount of $23,093.

Revenue annualization – Staff retracts the $2,574 annualization adjustment.

Line of credit – Staff recommends approval of a $70,000 line of credit for Duncan to borrow from Duncan Valley Electric Cooperative for the exclusive purpose of financing increases to its under-collected Purchased Gas Adjustor ("PGA") bank balance.

Revenue requirement – Staff recommends an increase in revenue of $149,981.

ACC Assessment bill add-on – Staff recommends that Duncan be ordered to have a separate bill add-on line for the ACC Assessment, however, Staff supports allowing the Cooperative to postpone presenting the ACC Assessment on a separate line until its billing system is updated.

**Q. Does this conclude your surrebuttal testimony?**

A. Yes, it does.

Duncan Rural Services Corporation
Docket No. G-02528A-05-0314
Test Year Ended December 31, 2004



**REVENUE REQUIREMENT**

| LINE NO. | DESCRIPTION | | [A] COMPANY ORIGINAL COST | | [B] STAFF ORIGINAL COST [1] |
|---|---|---|---|---|---|
| 1 | Adjusted Operating Income (Loss) | $ | (46,968) | $ | (47,976) |
| 2 | Depreciation and Amortization | $ | 49,645 | $ | 49,645 |
| 3 | Long-term Debt Interest Expense | $ | 31,112 | $ | 23,093 |
| 4 | Income Tax Expense | | N/A | $ | 12,331 |
| 5 | Principal Repayment | $ | 45,303 | $ | 54,661 |
| 6 | Recommended Increase in Operating Margin | $ | 108,814 | $ | 113,641 |
| 7 | Gross Revenue Conversion Factor | | 1.3514 | | 1.3198 |
| 8a | **Recommended Increase in Operating Revenue** | $ | 147,406 | **$** | **149,981** |
| 8b | **Percent Increase (Line 8a / Line 9) - Per Staff** | | N/A | | **23.10%** |
| 8c | Percent Increase (Line 8a / Line 9) - Per Coop | | 22.70% | | N/A |
| 9 | Adjusted Test Year Operating Revenue | $ | 649,377 | $ | 323,238 |
| 10 | **Recommended Annual Operating Revenue** | $ | 796,783 | **$** | **473,219** |
| 11a | **Recommended Operating Margin** | $ | 61,846 | **$** | **65,665** |
| 11b | Recommended Net Margin | $ | 30,845 | $ | 42,682 |
| 12a | **Recommended Operating TIER (L11a+L4)/L3 - Per Staff** | | N/A | | **3.38** |
| 12b | Recommended Net TIER Per Coop | | 2.00 | | N/A |
| 13a | **Recommended DSC (L11a+L2+L4)/(L3+L5) - Per Staff** | | N/A | | **1.64** |
| 13b | Recommended DSC Per Coop | | 1.38 | | N/A |
| 14 | **Adjusted Rate Base** | $ | 772,408 | **$** | **758,057** |
| 15 | Rate of Return (L10 / L14) | | 8.01% | | 8.66% |

References:
Column [A]: Company Schedules A-1, C-1, C-3
Column [B]: Staff Schedules DTZ-2, DTZ-8

[1] Staff recommendation reflects Duncan Rural Service Corporations initial revenue increase of $147,406. In rebuttal testimony the company has requested an increase of $167,705.

Duncan Rural Services Corporation
Docket No. G-02528A-05-0314
Test Year Ended December 31, 2004

Surrebuttal Schedule DTZ-2

**GROSS REVENUE CONVERSION FACTOR**

| LINE NO. | DESCRIPTION | (A) [1] | (B) | (C) | (D) |
|---|---|---|---|---|---|
| | *Calculation of Gross Revenue Conversion Factor:* | | | | |
| 1 | Billings | 1.000000 | | | |
| 2 | Uncollectible Factor | 0.000000 | | | |
| 3 | Revenues | 1.000000 | | | |
| 4 | Less: Combined Federal and State Tax Rate (Line 12) | 0.242297 | | | |
| 5 | Subtotal (L3 - L4) | 0.7577 | | | |
| 6 | **Revenue Conversion Factor (L1 / L5)** | **1.31978** | | | |
| | *Calculation of Effective Tax Rate:* | | | | |
| 7 | Operating Income Before Taxes (Arizona Taxable Income) | 100.0000% | | | |
| 8 | Arizona State Income Tax Rate | 6.9680% | | | |
| 9 | Federal Taxable Income (L7 - L8) | 93.0320% | | | |
| 10 | Applicable Federal Income Tax Rate (Line 34) | 18.5545% | | | |
| 11 | Effective Federal Income Tax Rate (L9 x L10) | 17.2617% | | | |
| 12 | Combined Federal and State Income Tax Rate (L8 +L11) | 24.2297% | | | |
| 13 | Required Operating Income (Schedule DTZ-1, Line 5) | $ 65,665 | | | |
| 14 | AdjustedTest Year Operating Income (Loss) (Schedule DTZ-10, Line 16) | $ (47,976) | | | |
| 15 | Required Increase in Operating Income (L13 - L14) | | $ 113,641 | | |
| 16 | Income Taxes on Recommended Revenue (Col. (D), L33) | $ 12,331 | | | |
| 17 | Income Taxes on Test Year Revenue (Col. (B), L33) | $ (24,008) | | | |
| 18 | Required Increase in Revenue to Provide for Income Taxes (L16 -L17) | | $ 36,340 | | |
| 19 | Total Required Increase in Revenue (L15 + L18) | | $ 149,980 | | |
| | *Calculation of Income Tax:* | Test Year | | Staff Recommended | |
| 20 | Revenue (Schedule DTZ-9, Columns C and E) | $ 323,238 | $ - | $ 473,218 | |
| 21 | Less: Operating Expenses Excluding Income Taxes | $ 395,222 | | $ 395,222 | |
| 22 | Less: Synchronized Interest (L37) | $ 20,657 | | $ 20,657 | |
| 23 | Arizona Taxable Income (L20 - L21 - L22) | $ (92,641) | | $ 57,339 | |
| 24 | Arizona State Income Tax Rate | 6.968% | | 6.968% | |
| 25 | Arizona Income Tax (L23 x L24) | | $ (6,455) | | $ 3,995 |
| 26 | Federal Taxable Income (L23 - L25) | $ (86,185) | | $ 53,344 | |
| 27 | Federal Tax on First Income Bracket ($1 - $50,000) @ 15% | $ (7,500) | | $ 7,500 | |
| 28 | Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25% | $ (6,250) | | $ 836 | |
| 29 | Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34% | $ (3,803) | | $ - | |
| 30 | Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39% | $ - | | $ - | |
| 31 | Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34% | $ - | | $ - | |
| 32 | Total Federal Income Tax | | $ (17,553) | | $ 8,336 |
| 33 | Combined Federal and State Income Tax (L25 + L32) | | $ (24,008) | | $ 12,331 |
| 34 | Applicable Federal Income Tax Rate [Col. (D), L32 - Col. (B), L32] / [Col. (C), L26 - Col. (A), L26] | | | | 18.5545% |
| | *Calculation of Interest Synchronization:* | | | | |
| 35 | Rate Base (Schedule DTZ-3, Col. (C), Line 13 | $ 758,057 | | | |
| 36 | Weighted Average Cost of Debt | 2.73% | | | |
| 37 | Synchronized Interest (L35 x L37) | $ 20,657 | | | |

[1] Staff recommendation reflects Duncan Rural Service Corporations initial revenue increase of $147,406. In rebuttal testimony the company has requested an increase of $167,705.

Duncan Rural Services Corporation
Docket No. G-02528A-05-0314
Test Year Ended December 31, 2004

Surrebuttal Schedule DTZ-3

**OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED**

| Line No. | DESCRIPTION | [A] COMPANY TEST YEAR AS FILED | [B] STAFF TEST YEAR ADJUSTMENTS | [C] STAFF TEST YEAR AS ADJUSTED | [D] STAFF PROPOSED CHANGES | [E] STAFF RECOMMENDED [1] |
|---|---|---|---|---|---|---|
| 1 | ***REVENUES:*** | | | | | |
| 2 | Sales Revenue of Gas - Base Cost of Gas | $ 206,689 | $ (206,689) | $ - | $ - | $ - |
| 3 | Sales Revenue of Gas - Fuel Adjustor | $ 118,453 | $ (118,453) | $ - | $ - | $ - |
| 4 | Sales Revenue of Gas - Non Base Cost of Gas | $ 319,025 | $ (997) | $ 318,028 | $ 149,980 | $ 468,008 |
| 5 | Other Operating Revenue | $ 5,210 | $ - | $ 5,210 | $ - | $ 5,210 |
| 6 | **Total Revenues** | $ 649,377 | $ (326,139) | $ 323,238 | $ 149,980 | $ 473,218 |
| 7 | ***EXPENSES:*** | | | | | |
| 8 | Gas Purchases | $ 325,260 | $ (325,260) | $ - | $ - | $ - |
| 9 | ***Distribution Expense - Operations*** | | | | | |
| 10 | Supervision | $ 950 | $ - | $ 950 | $ - | $ 950 |
| 11 | Mains & Services | $ 110,026 | $ - | $ 110,026 | $ - | $ 110,026 |
| 12 | Measuring & Regulation Stations | $ 13,753 | $ - | $ 13,753 | $ - | $ 13,753 |
| 13 | Meters & House Regulators | $ 20,214 | $ - | $ 20,214 | $ - | $ 20,214 |
| 14 | Other Expenses | $ 3,116 | $ - | $ 3,116 | $ - | $ 3,116 |
| 15 | Rents | $ 6,039 | $ - | $ 6,039 | $ - | $ 6,039 |
| 16 | **Total Distribution Expense-Operations** | $ 154,098 | $ - | $ 154,098 | $ - | $ 154,098 |
| 17 | ***Distribution Expense - Maintenance*** | | | | | |
| 18 | Maintenance-Supervision | $ - | $ - | $ - | $ - | $ - |
| 19 | Maintenance-Mains & Services | $ 46,098 | $ - | $ 46,098 | $ - | $ 46,098 |
| 20 | Maintenance-Measuring & Regulation Stations | $ - | $ - | $ - | $ - | $ - |
| 21 | Maintenance-Services | $ - | $ - | $ - | $ - | $ - |
| 22 | Maintenance-Meters & House Regulators | $ 8,726 | $ - | $ 8,726 | $ - | $ 8,726 |
| 23 | Maintenance-Other Equipment | $ - | $ - | $ - | $ - | $ - |
| 24 | **Total Distribution Expense-Maintenance** | $ 54,824 | $ - | $ 54,824 | $ - | $ 54,824 |
| 25 | ***Consumer Accounts Expense*** | | | | | |
| 26 | Meter Reading Expense | $ 25,048 | $ - | $ 25,048 | $ - | $ 25,048 |
| 27 | Consumer Expense | $ 30,523 | $ - | $ 30,523 | $ - | $ 30,523 |
| 28 | Reserve for Uncollectible Accounts | $ 1,500 | $ - | $ 1,500 | $ - | $ 1,500 |
| 29 | Information & Instruction ads | $ 3,058 | $ - | $ 3,058 | $ - | $ 3,058 |
| 30 | **Total Consumer Accounts Expense** | $ 60,129 | $ - | $ 60,129 | $ - | $ 60,129 |
| 31 | ***Administrative and General Expense*** | | | | | |
| 32 | Salaries | $ 8,491 | $ - | $ 8,491 | $ - | $ 8,491 |
| 33 | Office Supplies and Expenses | $ 3,606 | $ - | $ 3,606 | $ - | $ 3,606 |
| 34 | Outside Services Employed | $ 11,826 | $ - | $ 11,826 | $ - | $ 11,826 |
| 35 | Rate Case | $ - | $ - | $ - | $ - | $ - |
| 36 | Property Insurance | $ - | $ - | $ - | $ - | $ - |
| 37 | Injuries and Damage Ins. | $ 17,568 | $ - | $ 17,568 | $ - | $ 17,568 |
| 38 | Regulatory Commission Expense | $ 15,802 | $ (6,323) | $ 9,479 | $ - | $ 9,479 |
| 39 | Miscellaneous General | $ 5,550 | $ - | $ 5,550 | $ - | $ 5,550 |
| 40 | **Total Administrative and General Expense** | $ 62,843 | $ (6,323) | $ 56,520 | $ - | $ 56,520 |
| 41 | Interest Expense - Customer Deposits | $ 367 | $ - | $ 367 | $ - | $ 367 |
| 42 | Depreciation and Amortization Expense | $ 49,645 | $ - | $ 49,645 | $ - | $ 49,645 |
| 43 | Tax Expense - Property | $ 19,639 | $ - | $ 19,639 | $ - | $ 19,639 |
| 44 | Tax Expense - Income Taxes | $ (30,460) | $ 6,452 | $ (24,008) | $ 36,339 | $ 12,331 |
| 45 | **Total Operating Expenses** | $ 696,345 | $ (325,131) | $ 371,214 | $ 36,339 | $ 407,553 |
| 46 | **Operating Margin Before Interest on L.T.- Debt** | $ (46,968) | $ (1,008) | $ (47,976) | $ 113,641 | $ 65,665 |
| 47 | **INTEREST ON LONG-TERM DEBT & OTHER DEDUCTIONS** | $ 31,112 | $ (8,019) | $ 23,093 | $ - | $ 23,093 |
| 48 | **MARGINS (LOSS) AFTER INTEREST EXPENSE** | $ (78,080) | $ 7,012 | $ (71,068) | $ 113,641 | $ 42,572 |
| 49 | **NON-OPERATING MARGINS** | $ 110 | $ - | $ 110 | $ - | $ 110 |
| 50 | **NET MARGINS (LOSS)** | $ (77,970) | $ 7,012 | $ (70,958) | $ 113,641 | $ 42,682 |

References:
Column (A): Cooperative Schedule C-1, Pages 1 and 2
Column (B): Schedule DTZ-8
Column (C): Column (A) + Column (B)
Column (D): Schedules DTZ-1
Column (E): Column (C) + Column (D)

[1] *Staff recommendation reflects Duncan Rural Service Corporations* initial revenue increase of $147,406. In rebuttal testimony the company has requested an increase of $167,705.

Duncan Rural Services Corporation
Docket No. G-02528A-05-0314
Test Year Ended December 31, 2004



**SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR**

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] ADJ #1 Revenue Annualization Ref: Sch DTZ-9 | [C] ADJ #2 Base Cost of Gas and Fuel Adjustor Ref: Sch DTZ-10 | [D] ADJ #3 ACC Assessment Charge Ref: Sch DTZ-11 | [E] ADJ #4 Rate Case Expense Ref: Sch DTZ-12 | [F] ADJ #5 Income Tax Expense Ref: Sch DTZ-13 | [G] ADJ #6 Interest Expense on Long Term Debt Ref: Sch DTZ-14 | [H] STAFF ADJUSTED |
|---|---|---|---|---|---|---|---|---|---|
| | ***REVENUES:*** | | | | | | | | |
| 1 | Sales Revenue of Gas - Base Cost of Gas | $ 206,689 | $ - | $ (206,689) | $ - | $ - | $ - | $ - | $ - |
| 2 | Sales Revenue of Gas - Fuel Adjustor | 118,453 | - | (118,453) | - | - | - | - | - |
| 3 | Sales Revenue of Gas - Margin (Non-gas) | 319,025 | - | - | (997) | - | - | - | 318,028 |
| 4 | Other Operating Revenue | 5,210 | - | - | - | - | - | - | 5,210 |
| 5 | **Total Revenues** | $ 649,377 | $ - | $ (325,142) | $ (997) | $ - | $ - | $ - | $ 323,238 |
| 6 | ***OPERATING EXPENSES:*** | | | | | | | | |
| 7 | Gas Purchases | $ 325,260 | $ - | $ (325,260) | $ - | $ - | $ - | $ - | $ - |
| 8 | **Distribution Expense - Operations** | | | | | | | | |
| 9 | Supervision | 950 | - | - | - | - | - | - | 950 |
| 10 | Mains & Services | 110,026 | - | - | - | - | - | - | 110,026 |
| 11 | Measuring & Regulation Stations | 13,753 | - | - | - | - | - | - | 13,753 |
| 12 | Meters & House Regulators | 20,214 | - | - | - | - | - | - | 20,214 |
| 13 | Other Expenses | 3,116 | - | - | - | - | - | - | 3,116 |
| 14 | Rents | 6,039 | - | - | - | - | - | - | 6,039 |
| 15 | **Distribution Expense - Operations** | 154,098 | - | - | - | - | - | - | 154,098 |
| 16 | **Distribution Expense - Maintenance** | | | | | | | | - |
| 17 | Supervision | - | - | - | - | - | - | - | - |
| 18 | Mains & Services | 46,098 | - | - | - | - | - | - | 46,098 |
| 19 | Measuring & Regulation Stations | - | - | - | - | - | - | - | - |
| 20 | Services | - | - | - | - | - | - | - | - |
| 21 | Meters & House Regulators | 8,726 | - | - | - | - | - | - | 8,726 |
| 22 | Other Equipment | - | - | - | - | - | - | - | - |
| 23 | **Distribution Expense - Maintenance** | 54,824 | - | - | - | - | - | - | 54,824 |
| 24 | **Consumer Accounts Expense** | | | | | | | | - |
| 25 | Meter Reading Expense | 25,048 | - | - | - | - | - | - | 25,048 |
| 26 | Consumer Expense | 30,523 | - | - | - | - | - | - | 30,523 |
| 27 | Reserve for Uncollectible Accounts | 1,500 | - | - | - | - | - | - | 1,500 |
| 28 | Information & Instruction ads | 3,058 | - | - | - | - | - | - | 3,058 |
| 29 | **Consumer Accounts Expense** | 60,129 | - | - | - | - | - | - | 60,129 |
| 30 | **Administrative and General Expense** | | | | | | | | - |
| 31 | Salaries | 8,491 | - | - | - | - | - | - | 8,491 |
| 32 | Office Supplies and Expenses | 3,606 | - | - | - | - | - | - | 3,606 |
| 33 | Outside Services Employed | 11,826 | - | - | - | - | - | - | 11,826 |
| 34 | Rate Case | - | - | - | - | - | - | - | - |
| 35 | Property Insurance | - | - | - | - | - | - | - | - |
| 36 | Injuries and Damage Ins. | 17,568 | - | - | - | - | - | - | 17,568 |
| 37 | Regulatory Commission Expense | 15,802 | - | - | (1,472) | (4,851) | - | - | 9,479 |
| 38 | Miscellaneous General | 5,550 | - | - | - | - | - | - | 5,550 |
| 39 | **Administrative and General Expense** | 62,843 | - | - | (1,472) | (4,851) | - | - | 56,520 |
| 40 | *Interest Expense - Customer Deposits* | 367 | - | - | - | - | - | - | 367 |
| 41 | Depreciation and Amortization Expense | 49,645 | - | - | - | - | - | - | 49,645 |
| 42 | Tax Expense - Property | 19,639 | - | - | - | - | - | - | 19,639 |
| 43 | Tax Expense - Income Taxes | (30,460) | - | - | - | - | 6,452 | - | (24,008) |
| 44 | | 39,191 | - | - | - | - | 6,452 | - | 45,643 |
| 45 | **Total Operating Expenses** | $ 696,345 | $ - | $ (325,260) | $ (1,472) | $ (4,851) | $ 6,452 | $ - | 371,214 |
| 46 | **Operating Margin Before Interest on L.T.- Debt** | $ (46,968) | $ - | $ 118 | $ 475 | $ 4,851 | $ (6,452) | $ - | (47,976) |
| 47 | ***INTEREST ON LONG-TERM DEBT & OTHER DEDUCTIONS*** | $ 31,112 | $ - | $ - | $ - | $ - | $ - | $ (8,019) | 23,093 |
| 48 | ***MARGINS (LOSS) AFTER INTEREST EXPENSE*** | $ (78,080) | $ - | $ 118 | $ 475 | $ 4,851 | $ (6,452) | $ 8,019 | $ (71,068) |
| 49 | ***NON-OPERATING MARGINS*** | $ 110 | $ - | $ - | $ - | $ - | $ - | $ - | $ 110 |
| 50 | ***NET MARGINS (LOSS)*** | $ (77,970) | $ - | $ 118 | $ 475 | $ 4,851 | $ (6,452) | $ 8,019 | $ (70,958) |

# IRVINE

**BEFORE THE ARIZONA CORPORATION COMMISSION**

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MARC SPITZER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

| | | |
|---|---|---|
| IN THE MATTER OF THE APPLICATION OF DUNCAN RURAL SERVICES CORPORATION FOR A RATE INCREASE | ) ) ) ) | DOCKET NO. G-02528A-05-0314 |

SURREBUTTAL

TESTIMONY

OF

STEVE IRVINE

PUBLIC UTILITIES ANALYST III

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

DECEMBER 5, 2005

# TABLE OF CONTENTS



## SCHEDULES

**EXECUTIVE SUMMARY**
**DUNCAN RURAL SERVICES CORPORATION**
**DOCKET NO. G-02528A-05-0314**

The surrebuttal testimony of Staff witness Steve Irvine addresses the following issues:

PGA Adjustor Bandwidth – Duncan Rural Services Corporation ("Duncan") proposes applying the existing $0.10 PGA Adjustor bandwidth limit on a monthly basis, i.e., allowing $0.10 variances each month instead of over the course of 12 months. Staff does not support this recommendation. This could result in increased variability in the PGA rate at a time when customer's bills are rising due to other conditions such as a recently approved surcharge, this rate case, and rising gas costs. Staff recommends approval of a line of credit from Duncan Valley Electric Cooperative to be used exclusively to finance growth of the under-collected PGA balance.

Combination of Summer and Winter Rates – Duncan proposes a higher winter per therm rate than the summer per therm rate. Given that customers will experience higher rates associated with the factors mentioned previously, Staff does not find it prudent to recommend a rate design that has higher costs in winter. Duncan's design would create an unnecessary cost burden during the winter season when use peaks for many customers. Staff recommends consolidation of the summer and winter commodity charges into a single commodity charge that applies all year, as shown in Staff Exhibit SPI-4.

Uniform Commodity Rates – Duncan proposes uniform Summer and uniform Winter commodity rates for all three customer classes. Staff adopted Duncan's proposed monthly service charges and subsequently determined the commodity rates giving consideration to Staff's cost of service study. Given that Staff's cost of service study indicates a different cost of service for each rate class, Staff recommends distinct commodity rates for each of the three rate classes as contained in SPI-4.

Revenue Annualization Adjustment – Surrebuttal Testimony of Staff witness Dan Zivan retracts an annualization adjustment that had increased test year revenue by $2,574. However, Staff inadvertently used the unadjusted billing determinants to design the rates in its Direct Testimony. Since Staff's rate design already reflects the appropriate billing determinants, retraction of the revenue annualization adjustment has no effect on Staff's rate design (SPI-1 and SPI-4).

Adjusted Rate Design – Two implementation errors occurred when developing the rate design Staff recommended in its Direct Testimony (SPI-1). Staff now recommends the rate design as contained in SPI-4 to correct these errors. The commodity rate in the 250 cfh & Below class has changed from $0.53480 to $0.57280 per therm. The commodity rate in the 250 cfh to 425 cfh class has changed from $0.42080 to $0.28480. The commodity rate in the 425 cfh to 1000 cfh class has changed from $0.74480 to $0.74880.

In summary, Staff continues to advocate adoption of the same fundamental rate structure recommended in its Direct Testimony modified to correct implementation errors. Staff's recommended rate design is presented in Staff Exhibit SPI-4.

## INTRODUCTION

**Q. Please state your name, occupation, and business address.**

A. My name is Steve Irvine. I am a Public Utilities Analyst III employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

**Q. Did you previously file Direct Testimony in this case?**

A. Yes.

**Q. What matters are addressed in your Surrebuttal Testimony?**

A. This surrebuttal testimony addresses comments contained in the rebuttal testimonies of Duncan Rural Services Corporation ("Duncan") witnesses Mr. Jack Shilling and Mr. John V. Wallace regarding the Purchased Gas Adjustor's ("PGA") $0.10 bandwidth, combining Summer and Winter rates and uniform commodity rates across customer classes. This surrebuttal also addresses the effect on rates from Staff's revocation of its $2,574 revenue annualization adjustment and submits a new rate design (SPI-4) as a result of implementation errors present in Staff's original rate design (SPI-1).

## PGA ADJUSTOR $0.10 BANDWIDTH

**Q. How is Duncan's current PGA adjustor rate calculated?**

A. Currently, Duncan's adjustor rate is determined each month by calculating the average of the past 12 months' gas cost and subtracting base cost of gas. Use of this method results in less change in customers' bills from one month to the next than what would occur should rates change each month based on the actual cost of gas. The adjustor rate that this formula yields is further subject to a constraint that reduces the variability in the cost of gas paid by customers. That constraint comes in the form of a $0.10 bandwidth that limits any new month's PGA rate to no more than a $0.10 per therm difference from any rate present in the previous 12 months.

**Q. What is Duncan proposing regarding the $0.10 bandwidth on the PGA adjustor?**

A. Duncan proposes to apply the $0.10 bandwidth limit on a monthly basis, i.e., allow $0.10 variances each month instead of over the course of 12 months (Shilling Rebuttal at Page 8). Duncan's proposal to allow the PGA rate to change by as much as $0.10 per therm each month has the potential to dramatically increase the variability in the PGA rate.

**Q. Does Staff agree with Duncan's proposal to change the $0.10 bandwidth to allow a $0.10 per therm change from one month to the next?**

A. No. Several factors exist currently that make such a change untimely: Decision No. 68297 (November 14, 2005) approved a $0.45 per therm surcharge, this rate case contemplates an increase in rates, and gas prices have been volatile and rising in the recent past. Changing the bandwidth implementation method at this time could result in increased burden to Duncan customers. Staff recognizes that a more restrictive bandwidth application can result in a larger under-collected PGA balance and increased financial burden for Duncan. Accordingly, Staff recommends approval of a line of credit from Duncan Valley Electric Cooperative to be ~~use~~ used exclusively to finance growth of the Duncan under-collected PGA balance. Specifically, Staff recommends a $70,000 credit line to finance the under-collected PGA balance to the extent that the under-collection increases from the balance at the time of implementation of new rates as ordered in this rate case. This recommendation for a revolving line of credit is discussed in detail in Surrebuttal Testimony of Staff witness Daniel Zivan.

**UNIFORM SUMMER AND WINTER RATES**

**Q. What has Duncan proposed regarding the summer and winter commodity rates?**

A. In both Direct and Surrebuttal Testimony, Mr. Wallace proposes a higher winter per therm rate than the summer per therm rate.

**Q. What are Staff's comments regarding Mr. Wallace's proposal for distinct summer and winter rates?**

A. As cited earlier, there are presently several conditions that lend to higher rates for Duncan customers: a recently approved $0.45 per therm surcharge, an increased revenue requirement contemplated in this rate case, and the rising cost of gas. Duncan's current summer commodity rate currently is $0.51 per therm and the winter commodity rate is $0.80 per therm. Given that customers will experience higher rates associated with the factors mentioned previously, Staff does not find it prudent to recommend a rate design that has higher costs in Winter. Duncan's rate design would create an unnecessary cost burden during the Winter season when use peaks for many customers. Staff continues to recommend consolidation of the summer and winter commodity rate into a single commodity rate that applies all year, as shown in Staff Exhibit SPI-1.

**UNIFORM COMMODITY RATES**

**Q. What is Duncan's proposal for the commodity rates for the three customer classes?**

A. Duncan proposes uniform summer and uniform winter commodity rates for all three customer classes (Wallace Rebuttal at Page 10). More specifically, Duncan proposes a $0.73 per therm winter commodity rate for all three rate classes and a $0.26 per therm the summer commodity rate for all three customer classes.

**Q. What support does Duncan provide for its proposal for uniform commodity rates among the three customer classes?**

A. Duncan offers the following statement (Wallace Rebuttal at Page 10).

> Besides the differences in the service line and meter that are recovered in the fixed monthly charge, the other distribution costs to serve the three customer classes are similar. Therefore, DRSC is recommending that the summer and winter rates be equal for all three classes.

**Q. What does Staff's cost of service study reveal regarding whether Staff's or Duncan's rate design more closely matches the cost to serve the three customer classes?**

A. Staff's cost of service study indicates that Staff's proposed rate design is closer to the actual cost of service than the rate design proposed by Duncan.

**Q. What is Staff's recommendation for commodity rates?**

A. Staff recommends the same monthly customer charges proposed by Duncan. Staff also recommends all but one of Duncan's proposed service charges. Given these components of the rate design, the commodity rates must be determined to provide the revenue requirement. Since Staff's cost of service study indicates that the three customer classes do not contribute equally to the system rate of return, Staff selected a distinct commodity rate for each of the three rate classes. Accordingly, Staff recommends the commodity rates presented in SPI-4.

## STAFF'S REVENUE ANNUALIZATION ADJUSTMENT

**Q. How does retraction of Staff's previous recommendation for a revenue annualization adjustment of $2,574 affect Staff's rate design?**

A. The Surrebuttal Testimony of Staff witness Dan Zivan retracts an annualization adjustment that had increased test year revenue by $2,574. Properly reflecting the now retracted annualization adjustment would have required increasing billing determinants. Spreading the revenue requirement over a larger billing determinant base would have resulted in lower rates. However, Staff inadvertently used the unadjusted billing determinants to design the rates in its Direct Testimony. The unadjusted billing determinants should be used with Staff's revised position. Since Staff's rate design already reflects the appropriate billing determinants, retraction of the revenue annualization adjustment has no effect on Staff's rate design (SPI-1 and SPI-4).

**ADJUSTED RATE DESIGN**

**Q. Does Staff continue to recommend the rate design contained in its Direct Testimony (SPI-1)?**

A. No. Staff discovered two implementation errors in development of its rate design. One error double counted revenues from service related charges. The other error incorrectly derived relative customer class data from the cost of service study. Staff now recommends the rate design contained in SPI-4 to correct the errors.

**Q. Do the changes in SPI-4 represent a significant change in the structure of Staff's rate design?**

A. The structure of Staff's revised rate design is unchanged. However, the revenue spread among customer classes changed.

**Q. Please provide a summary of changes from present rates to Staff's recommended rates.**

A. The commodity rate in the 250 cubic feet per hour ("cfh") & Below class has changed from $0.53480 to $0.57280 per therm. The commodity rate in the 250 cfh to 425 cfh class has changed from $0.42080 to $0.28480. The commodity rate in the 425 cfh to 1000 cfh class has changed from $0.74480 to $0.74880. Schedules SPI-4 and SPI-5 reflect these adjustments. It should also be noted that SPI-5, Page 1 of 4, now includes typical monthly bills based on an average usage for a whole year in addition to bills based on seasonally averaged winter and summer usage. This line is marked 'Annual'.

**Q. What are the effects of this change to rates in the 250 cfh & Below class?**

A. The "Return Index" for this class decreases from its present level of 0.74 to 0.68. Based on average monthly usage of 44 therms, a customer would pay $69.70, an increase of 24.93 percent, or $13.91. This bill calculation includes the monthly minimum charge, commodity charge, and an estimated PGA rate. Taxes, assessments, surcharges, and surcredits are not included in the calculations. Effects of rate changes on customer bills over a range of use levels for each of the rate classes are shown in Schedule SPI-5.

**Q. What are the effects of this change to rates in the 250 cfh to 425 cfh class?**

A. The "Return Index" increases from its present level of 4.12 to 5.10. Based on average monthly usage of 741 therms, a customer would pay $660.62, an increase of 12.81 percent, or $75.00. This bill calculation includes the monthly minimum charge, commodity charge, and an estimated PGA rate. Taxes, assessments, surcharges, and surcredits are not included in the calculations. Effects of rate changes on customer bills over a range of use levels for each of the rate classes are shown in Schedule SPI-5.

**Q. What are the effects of this change to rates in the in the 425 cfh to 1000 cfh class?**

A. The "Return Index" decreases from its present level of 0.61 to 0.19. Based on average monthly usage of 701 therms, a customer would pay $962.07, an increase of 33.98 percent, or $243.97. This bill calculation includes the monthly minimum charge, commodity charge, and an estimated PGA rate. Taxes, assessments, surcharges, and surcredits are not included in the calculations. Effects of rate changes on customer bills over a range of use levels for each of the rate classes are shown in Schedule SPI-5.

## SUMMARY OF STAFF RECOMMENDATIONS

**Q. Please provide a brief summary of Staff's recommendations.**

A. Staff's recommendations are as follows:

1. Staff recommends approval of a $70,000 credit line to finance the under-collected PGA balance to the extent that the under-collection increases from the balance at the time of implementation of new rates as ordered in this rate case.

2. Staff recommends approval of rates shown on page 1 of Schedule SPI-1.

**Q. Does this conclude your Surrebuttal Testimony?**

A. Yes, it does.

## RATE DESIGN

| | Present rates | Company Proposed Rates | Company % change | Staff Proposed Rates | Staff % change |
|---|---|---|---|---|---|
| **Monthly Minimum Charge** | | | | | |
| <250 | $15.00 | $20.00 | 33.33% | $20.00 | 33.33% |
| 250<425 | $22.50 | $30.00 | 33.33% | $30.00 | 33.33% |
| 425<1000 | $30.00 | $40.00 | 33.33% | $40.00 | 33.33% |
| **Energy (Commodity) Rate - Per Therm** | | | | | |
| **<250** | | | | | |
| winter | $0.80000 | $0.73000 | -8.75% | $0.57280 | -28.40% |
| summer | $0.51405 | $0.26000 | -49.42% | $0.57280 | 11.43% |
| **250<425** | | | | | |
| winter | $0.80000 | $0.73000 | -8.75% | $0.28480 | -64.40% |
| summer | $0.51405 | $0.26000 | -49.42% | $0.28480 | -44.60% |
| **425<1000** | | | | | |
| winter | $0.80000 | $0.73000 | -8.75% | $0.74880 | -6.40% |
| summer | $0.51405 | $0.26000 | -49.42% | $0.74880 | 45.67% |
| **Service Related Charges** | | | | | |
| Establishment of Service - Regular Hour | $35.00 | $35.00 | 0.00% | $35.00 | 0.00% |
| Establishment of Service - After Hour | $50.00 | $50.00 | 0.00% | $50.00 | 0.00% |
| Reconect/Re-establishment of Service - Regular Hour | $50.00 | $50.00 | 0.00% | $50.00 | 0.00% |
| Reconect/Re-establishment of Service - After Hour | $75.00 | $75.00 | 0.00% | $75.00 | 0.00% |
| After Hours Service Call* | $50.00 | $50.00 | 0.00% | $50.00 | 0.00% |
| Meter Re-read (No charge for Read error) | $30.00 | $30.00 | 0.00% | $30.00 | 0.00% |
| Meter Test Fee | $50.00 | $50.00 | 0.00% | $50.00 | 0.00% |
| Insufficient Funds Check | $20.00 | $20.00 | 0.00% | $20.00 | 0.00% |
| Interest on Consumer Depoits | 3.00% | **Variable | | 6.00% | |
| Late/Deferred Payment (Per Month) | 0.00% | 1.50% | | 1.50% | |

*One hour minimum
**Based on Three Month Non-Financial
Federal Reserve Commercial Paper Rate

Typical Bill Analysis
Duncan Rural Services Corp.
Docket No. G-02528A-05-0314
Test Year Ended Dec. 31, 2004



## TYPICAL BILL ANALYSIS
## BASED ON AVERAGE THERM CONSUMPTION

**Company Proposed**

| | | Avg Therms Used Per Bill | Present Rates | Proposed Rates | Dollar Increase | Percent Increase |
|---|---|---|---|---|---|---|
| 250 cfh & Below | Winter | 76 | $92.28 | $119.13 | $ 26.85 | 29.09% |
| 250 cfh & Below | Summer | 20 | $29.42 | $36.45 | $ 7.02 | 23.87% |
| 250 cfh & Below | Annual | 44 | $55.79 | $71.13 | $ 15.34 | 27.49% |
| Above 250 cfh to 425 cfh | Winter | 262 | $287.63 | $370.08 | $ 82.45 | 28.66% |
| Above 250 cfh to 425 cfh | Summer | 997 | $745.60 | $854.56 | $ 108.96 | 14.61% |
| Above 250 cfh to 425 cfh | Annual | 741 | $585.61 | $685.31 | $ 99.70 | 17.02% |
| Above 425 cfh to 1,000 cfh | Winter | 1,430 | $1,475.73 | $1,894.40 | $ 418.67 | 28.37% |
| Above 425 cfh to 1,000 cfh | Summer | 128 | $122.81 | $145.83 | $ 23.02 | 18.75% |
| Above 425 cfh to 1,000 cfh | Annual | 701 | $718.09 | $915.20 | $ 197.11 | 27.45% |

**Staff Proposed**

| | | Avg Therms Used Per Bill | Present Rates | Proposed Rates* | Dollar Increase | Percent Increase |
|---|---|---|---|---|---|---|
| 250 cfh & Below | Winter | 76 | $92.28 | $107.11 | $14.83 | 16.07% |
| 250 cfh & Below | Summer | 20 | $29.42 | $42.67 | $13.25 | 45.02% |
| 250 cfh & Below | Annual | 44 | $55.79 | $69.70 | $13.91 | 24.93% |
| Above 250 cfh to 425 cfh | Winter | 262 | $287.63 | $253.33 | -$34.31 | -11.93% |
| Above 250 cfh to 425 cfh | Summer | 997 | $745.60 | $879.30 | $133.69 | 17.93% |
| Above 250 cfh to 425 cfh | Annual | 741 | $585.61 | $660.62 | $75.00 | 12.81% |
| Above 425 cfh to 1,000 cfh | Winter | 1,430 | $1,475.73 | $1,921.29 | $445.56 | 30.19% |
| Above 425 cfh to 1,000 cfh | Summer | 128 | $122.81 | $208.39 | $85.59 | 69.69% |
| Above 425 cfh to 1,000 cfh | Annual | 701 | $718.09 | $962.07 | $243.97 | 33.98% |

*Note that Staff has proposed a single annual rate. This column represents bills given average seasonal usage.

Typical Bill Analysis
Duncan Rural Services Corp.
Docket No. G-02528A-05-0314
Test Year Ended Dec. 31, 2004



BASED ON VARIOUS THERM CONSUMPTION LEVELS
**250 cfh & Below**

| Therm Consumption | Winter Present Rates | Company Winter Proposed Rates | % Change | Summer Present Rates | Company Summer Proposed Rates | % Change | Staff Year Proposed Rates | % Change **over winter** | % Change **over summer** |
|---|---|---|---|---|---|---|---|---|---|
| 0 | $ 15.00 | $ 20.00 | 33.33% | $ 15.00 | $ 20.00 | 33.33% | $ 20.00 | 33.33% | 33.33% |
| 25 | $ 40.28 | $ 38.25 | -5.03% | $ 33.13 | $ 26.50 | -20.00% | $ 48.49 | 20.40% | 46.38% |
| 50 | $ 65.55 | $ 56.50 | -13.81% | $ 51.25 | $ 33.00 | -35.61% | $ 76.98 | 17.44% | 50.20% |
| 60 | $ 75.66 | $ 63.80 | -15.68% | $ 58.50 | $ 35.60 | -39.15% | $ 88.38 | 16.81% | 51.06% |
| 70 | $ 85.77 | $ 71.10 | -17.10% | $ 65.75 | $ 38.20 | -41.90% | $ 99.77 | 16.32% | 51.73% |
| 75 | $ 90.83 | $ 74.75 | -17.70% | $ 69.38 | $ 39.50 | -43.07% | $ 105.47 | 16.12% | 52.02% |
| 80 | $ 95.88 | $ 78.40 | -18.23% | $ 73.00 | $ 40.80 | -44.11% | $ 111.17 | 15.94% | 52.27% |
| 90 | $ 105.99 | $ 85.70 | -19.14% | $ 80.25 | $ 43.40 | -45.92% | $ 122.56 | 15.64% | 52.72% |
| 100 | $ 116.10 | $ 93.00 | -19.90% | $ 87.51 | $ 46.00 | -47.43% | $ 133.96 | 15.38% | 53.09% |
| 125 | $ 141.38 | $ 111.25 | -21.31% | $ 105.63 | $ 52.50 | -50.30% | $ 162.45 | 14.91% | 53.79% |
| 150 | $ 166.65 | $ 129.50 | -22.29% | $ 123.76 | $ 59.00 | -52.33% | $ 190.94 | 14.57% | 54.28% |
| 175 | $ 191.93 | $ 147.75 | -23.02% | $ 141.88 | $ 65.50 | -53.84% | $ 219.43 | 14.33% | 54.65% |
| 200 | $ 217.20 | $ 166.00 | -23.57% | $ 160.01 | $ 72.00 | -55.00% | $ 247.92 | 14.14% | 54.94% |
| 250 | $ 267.75 | $ 202.50 | -24.37% | $ 196.26 | $ 85.00 | -56.69% | $ 304.90 | 13.87% | 55.35% |
| 300 | $ 318.30 | $ 239.00 | -24.91% | $ 232.52 | $ 98.00 | -57.85% | $ 361.88 | 13.69% | 55.64% |
| 350 | $ 368.85 | $ 275.50 | -25.31% | $ 268.77 | $ 111.00 | -58.70% | $ 418.85 | 13.56% | 55.84% |
| 400 | $ 419.40 | $ 312.00 | -25.61% | $ 305.02 | $ 124.00 | -59.35% | $ 475.83 | 13.46% | 56.00% |
| 450 | $ 469.95 | $ 348.50 | -25.84% | $ 341.27 | $ 137.00 | -59.86% | $ 532.81 | 13.38% | 56.13% |
| 500 | $ 520.50 | $ 385.00 | -26.03% | $ 377.53 | $ 150.00 | -60.27% | $ 589.79 | 13.31% | 56.23% |
| 750 | $ 773.25 | $ 567.50 | -26.61% | $ 558.79 | $ 215.00 | -61.52% | $ 874.69 | 13.12% | 56.53% |
| 1000 | $ 1,026.00 | $ 750.00 | -26.90% | $ 740.05 | $ 280.00 | -62.16% | $ 1,159.58 | 13.02% | 56.69% |

NOTE:

| | |
|---|---|
| Fuel Adjustor Included in Present Rates | $0.2110 |
| Fuel Adjustor Included in Staff Proposed Rates | $0.5668 |
| Fuel Adjustor Included in Company Proposed Rates | $0.5668 |

BASED ON VARIOUS THERM CONSUMPTION LEVELS
**Above 250 cfh to 425 cfh**

| Therm Consumption | Winter Present Rates | Company Winter Proposed Rates | % Change | Summer Present Rates | Company Summer Proposed Rates | % Change | Staff Year Proposed Rates | % Change **over winter** | % Change **over summer** |
|---|---|---|---|---|---|---|---|---|---|
| 0 | $ 22.50 | $ 30.00 | 33.33% | $ 22.50 | $ 30.00 | 33.33% | $ 30.00 | 33.33% | 33.33% |
| 25 | $ 47.78 | $ 48.25 | 0.99% | $ 40.63 | $ 36.50 | -10.16% | $ 51.29 | 7.36% | 26.25% |
| 50 | $ 73.05 | $ 66.50 | -8.97% | $ 58.75 | $ 43.00 | -26.81% | $ 72.58 | -0.64% | 23.53% |
| 60 | $ 83.16 | $ 73.80 | -11.26% | $ 66.00 | $ 45.60 | -30.91% | $ 81.10 | -2.48% | 22.87% |
| 70 | $ 93.27 | $ 81.10 | -13.05% | $ 73.25 | $ 48.20 | -34.20% | $ 89.61 | -3.92% | 22.33% |
| 75 | $ 98.33 | $ 84.75 | -13.81% | $ 76.88 | $ 49.50 | -35.61% | $ 93.87 | -4.53% | 22.10% |
| 80 | $ 103.38 | $ 88.40 | -14.49% | $ 80.50 | $ 50.80 | -36.90% | $ 98.13 | -5.08% | 21.89% |
| 90 | $ 113.49 | $ 95.70 | -15.68% | $ 87.75 | $ 53.40 | -39.15% | $ 106.64 | -6.03% | 21.52% |
| 100 | $ 123.60 | $ 103.00 | -16.67% | $ 95.01 | $ 56.00 | -41.06% | $ 115.16 | -6.83% | 21.21% |
| 125 | $ 148.88 | $ 121.25 | -18.56% | $ 113.13 | $ 62.50 | -44.75% | $ 136.45 | -8.35% | 20.61% |
| 150 | $ 174.15 | $ 139.50 | -19.90% | $ 131.26 | $ 69.00 | -47.43% | $ 157.74 | -9.42% | 20.17% |
| 175 | $ 199.43 | $ 157.75 | -20.90% | $ 149.38 | $ 75.50 | -49.46% | $ 179.03 | -10.23% | 19.84% |
| 200 | $ 224.70 | $ 176.00 | -21.67% | $ 167.51 | $ 82.00 | -51.05% | $ 200.32 | -10.85% | 19.59% |
| 250 | $ 275.25 | $ 212.50 | -22.80% | $ 203.76 | $ 95.00 | -53.38% | $ 242.90 | -11.75% | 19.21% |
| 300 | $ 325.80 | $ 249.00 | -23.57% | $ 240.02 | $ 108.00 | -55.00% | $ 285.48 | -12.38% | 18.94% |
| 350 | $ 376.35 | $ 285.50 | -24.14% | $ 276.27 | $ 121.00 | -56.20% | $ 328.05 | -12.83% | 18.75% |
| 400 | $ 426.90 | $ 322.00 | -24.57% | $ 312.52 | $ 134.00 | -57.12% | $ 370.63 | -13.18% | 18.60% |
| 450 | $ 477.45 | $ 358.50 | -24.91% | $ 348.77 | $ 147.00 | -57.85% | $ 413.21 | -13.45% | 18.48% |
| 500 | $ 528.00 | $ 395.00 | -25.19% | $ 385.03 | $ 160.00 | -58.44% | $ 455.79 | -13.68% | 18.38% |
| 750 | $ 780.75 | $ 577.50 | -26.03% | $ 566.29 | $ 225.00 | -60.27% | $ 668.69 | -14.35% | 18.08% |
| 1000 | $ 1,033.50 | $ 760.00 | -26.46% | $ 747.55 | $ 290.00 | -61.21% | $ 881.58 | -14.70% | 17.93% |
| 1250 | $ 1,286.25 | $ 942.50 | -26.72% | $ 928.81 | $ 355.00 | -61.78% | $ 1,094.48 | -14.91% | 17.84% |
| 1500 | $ 1,539.00 | $ 1,125.00 | -26.90% | $ 1,110.08 | $ 420.00 | -62.16% | $ 1,307.38 | -15.05% | 17.77% |
| 1750 | $ 1,791.75 | $ 1,307.50 | -27.03% | $ 1,291.34 | $ 485.00 | -62.44% | $ 1,520.27 | -15.15% | 17.73% |
| 2000 | $ 2,044.50 | $ 1,490.00 | -27.12% | $ 1,472.60 | $ 550.00 | -62.65% | $ 1,733.17 | -15.23% | 17.69% |
| 2500 | $ 2,550.00 | $ 1,855.00 | -27.25% | $ 1,835.13 | $ 680.00 | -62.95% | $ 2,158.96 | -15.33% | 17.65% |
| 3000 | $ 3,055.50 | $ 2,220.00 | -27.34% | $ 2,197.65 | $ 810.00 | -63.14% | $ 2,584.75 | -15.41% | 17.61% |
| 4000 | $ 4,066.50 | $ 2,950.00 | -27.46% | $ 2,922.70 | $ 1,070.00 | -63.39% | $ 3,436.34 | -15.50% | 17.57% |
| 5000 | $ 5,077.50 | $ 3,680.00 | -27.52% | $ 3,647.75 | $ 1,330.00 | -63.54% | $ 4,287.92 | -15.55% | 17.55% |

NOTE:

| | |
|---|---|
| Fuel Adjustor Included in Present Rates | $0.2110 |
| Fuel Adjustor Included in Staff Proposed Rates | $0.5668 |
| Fuel Adjustor Included in Company Proposed Rates | $0.5668 |

BASED ON VARIOUS THERM CONSUMPTION LEVELS
**Above 425 cfh to 1,000 cfh**

| Therm Consumption | Winter Present Rates | Company Winter Proposed Rates | % Change | Summer Present Rates | Company Summer Proposed Rates | % Change | Staff Year Proposed Rates | % Change over winter | % Change over summer |
|---|---|---|---|---|---|---|---|---|---|
| 0 | $ 30.00 | $ 40.00 | $0.33 | $ 30.00 | $ 40.00 | 33.33% | $ 40.00 | 33.33% | 33.33% |
| 10 | $ 40.11 | $ 47.30 | $0.18 | $ 37.25 | $ 42.60 | 14.36% | $ 53.16 | 32.53% | 42.70% |
| 20 | $ 50.22 | $ 54.60 | $0.09 | $ 44.50 | $ 45.20 | 1.57% | $ 66.31 | 32.04% | 49.01% |
| 50 | $ 80.55 | $ 76.50 | -$0.05 | $ 66.25 | $ 53.00 | -20.00% | $ 105.78 | 31.32% | 59.66% |
| 100 | $ 131.10 | $ 113.00 | -$0.14 | $ 102.51 | $ 66.00 | -35.61% | $ 171.56 | 30.86% | 67.37% |
| 150 | $ 181.65 | $ 149.50 | -$0.18 | $ 138.76 | $ 79.00 | -43.07% | $ 237.34 | 30.66% | 71.04% |
| 200 | $ 232.20 | $ 186.00 | -$0.20 | $ 175.01 | $ 92.00 | -47.43% | $ 303.12 | 30.54% | 73.20% |
| 250 | $ 282.75 | $ 222.50 | -$0.21 | $ 211.26 | $ 105.00 | -50.30% | $ 368.90 | 30.47% | 74.62% |
| 300 | $ 333.30 | $ 259.00 | -$0.22 | $ 247.52 | $ 118.00 | -52.33% | $ 434.68 | 30.42% | 75.62% |
| 350 | $ 383.85 | $ 295.50 | -$0.23 | $ 283.77 | $ 131.00 | -53.84% | $ 500.45 | 30.38% | 76.36% |
| 400 | $ 434.40 | $ 332.00 | -$0.24 | $ 320.02 | $ 144.00 | -55.00% | $ 566.23 | 30.35% | 76.94% |
| 450 | $ 484.95 | $ 368.50 | -$0.24 | $ 356.27 | $ 157.00 | -55.93% | $ 632.01 | 30.33% | 77.40% |
| 500 | $ 535.50 | $ 405.00 | -$0.24 | $ 392.53 | $ 170.00 | -56.69% | $ 697.79 | 30.31% | 77.77% |
| 750 | $ 788.25 | $ 587.50 | -$0.25 | $ 573.79 | $ 235.00 | -59.04% | $ 1,026.69 | 30.25% | 78.93% |
| 1000 | $ 1,041.00 | $ 770.00 | -$0.26 | $ 755.05 | $ 300.00 | -60.27% | $ 1,355.58 | 30.22% | 79.54% |
| 1250 | $ 1,293.75 | $ 952.50 | -$0.26 | $ 936.31 | $ 365.00 | -61.02% | $ 1,684.48 | 30.20% | 79.91% |
| 1500 | $ 1,546.50 | $ 1,135.00 | -$0.27 | $ 1,117.58 | $ 430.00 | -61.52% | $ 2,013.38 | 30.19% | 80.16% |
| 1750 | $ 1,799.25 | $ 1,317.50 | -$0.27 | $ 1,298.84 | $ 495.00 | -61.89% | $ 2,342.27 | 30.18% | 80.34% |
| 2000 | $ 2,052.00 | $ 1,500.00 | -$0.27 | $ 1,480.10 | $ 560.00 | -62.16% | $ 2,671.17 | 30.17% | 80.47% |
| 2500 | $ 2,557.50 | $ 1,865.00 | -$0.27 | $ 1,842.63 | $ 690.00 | -62.55% | $ 3,328.96 | 30.16% | 80.66% |
| 3000 | $ 3,063.00 | $ 2,230.00 | -$0.27 | $ 2,205.15 | $ 820.00 | -62.81% | $ 3,986.75 | 30.16% | 80.79% |
| 3500 | $ 3,568.50 | $ 2,595.00 | -$0.27 | $ 2,567.68 | $ 950.00 | -63.00% | $ 4,644.55 | 30.15% | 80.89% |
| 4000 | $ 4,074.00 | $ 2,960.00 | -$0.27 | $ 2,930.20 | $ 1,080.00 | -63.14% | $ 5,302.34 | 30.15% | 80.95% |
| 4500 | $ 4,579.50 | $ 3,325.00 | -$0.27 | $ 3,292.73 | $ 1,210.00 | -63.25% | $ 5,960.13 | 30.15% | 81.01% |
| 5000 | $ 5,085.00 | $ 3,690.00 | -$0.27 | $ 3,655.25 | $ 1,340.00 | -63.34% | $ 6,617.92 | 30.15% | 81.05% |
| 5500 | $ 5,590.50 | $ 4,055.00 | -$0.27 | $ 4,017.78 | $ 1,470.00 | -63.41% | $ 7,275.71 | 30.14% | 81.09% |
| 6000 | $ 6,096.00 | $ 4,420.00 | -$0.27 | $ 4,380.30 | $ 1,600.00 | -63.47% | $ 7,933.51 | 30.14% | 81.12% |

NOTE:

| | |
|---|---|
| Fuel Adjustor Included in Present Rates | $0.2110 |
| **Fuel Adjustor Included in Staff Proposed Rates** | **$0.5668** |
| Fuel Adjustor Included in Company Proposed Rate | $0.5668 |